

2017 National Geospatial Data Asset (NGDA) Theme Summary Report

Cadastre Theme

Overview:

This report aggregates information related to the National Geospatial Data Asset (NGDA) Theme in the title above. NGDA Themes serve as the management units for collections of related NGDA Datasets that benefit from coordinated development and management across the NGDA national geospatial portfolio. These NGDA Datasets are considered national capital assets and must meet the criteria outlined in [OMB Circular A-16 Supplemental Guidance](#). The guidance directs the Federal Geographic Data Committee (FGDC) through cooperation with Federal agencies to implement and use a Portfolio management approach for managing NGDA Themes and their associated NGDA Datasets both within and across NGDA Themes. This ensures NGDA Themes are managed by officially designated agencies, on behalf of all users. In addition, each NGDA Theme has a Strategic Plan that establishes goals and objectives and an associated Implementation Plan that describes the activities the Theme will undertake to address them. Unless otherwise noted, this report covers the period from the baseline Lifecycle Maturity Assessment (LMA) in 2015 to August 2017.

NGDA Theme Details:

Theme: [Cadastre Theme](#)

Theme Definition: Past, current, and future rights and interests in real property including the spatial information necessary to describe geographic extents. Rights and interests are benefits or enjoyment in real property that can be conveyed, transferred, or otherwise allocated to another for economic remuneration. Rights and interests are recorded in land record documents. The spatial information necessary to describe geographic extents includes surveys and legal description frameworks such as the Public Land Survey System, as well as parcel-by-parcel surveys and descriptions. Does not include Federal government or military facilities.

Theme Lead Agency: U.S. Department of Interior, Bureau of Land Management

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Total Associated NGDA Datasets: 19

The following NGDA Datasets are associated with this NGDA Theme. This list includes an embedded hyperlink to the NGDA metadata found on [Data.gov](https://data.gov). Please note if the metadata has been updated and re-harvested after publication of this report, the link may no longer be valid. The NGDA Dataset may be searched for manually in [Data.gov](https://data.gov) or [GeoPlatform.gov](https://www.geoplatform.gov) by using the official NGDA Name (in Table 1 below) and including the keyword “NGDA” to narrow the results.

NGDA Name and Associated Data.gov Link	Agency Acronym
Administrative Boundaries of National Park System	DOI-NPS
Army Military Land Tracts (AMLT)	DOD-USACE
BIA Indian Lands Dataset (Indian Lands of the United States)	DOI-BIA
BLM National Public Land Survey System Polygons	DOI-BLM
BLM National Surface Management Agency Area Polygons	DOI-BLM
Administrative Boundaries of National Park System	DOI-NPS
Army Military Land Tracts (AMLT)	DOD-USACE
BIA Indian Lands Dataset (Indian Lands of the United States)	DOI-BIA
BLM National Public Land Survey System Polygons	DOI-BLM
BLM National Surface Management Agency Area Polygons	DOI-BLM
FS National Forest Dataset (US Forest Service Proclaimed Forests)	DOI-BLM
FWS Interest	DOI-BLM
Outer Continental Shelf Active Renewable Energy Leases	DOD-AT&L
Outer Continental Shelf Lease Blocks - Alaska Region NAD83	USDA-USFS
Outer Continental Shelf Lease Blocks - Atlantic Region NAD83	DOI-FWS
Outer Continental Shelf Lease Blocks - Gulf of Mexico Region NAD27	DOI-BOEM
Outer Continental Shelf Lease Blocks - Pacific Region - West Coast NAD83	DOI-BOEM
Outer Continental Shelf Official Protraction Diagrams - Alaska Region NAD 83	DOI-BOEM
Outer Continental Shelf Official Protraction Diagrams - Atlantic Region NAD 83	DOI-BOEM
Outer Continental Shelf Official Protraction Diagrams - Pacific Region - West Coast NAD 83	DOI-BOEM
Outer Continental Shelf Official Protraction Diagrams And Lease Maps - Gulf Of Mexico Region NAD27	DOI-BOEM
Outer Continental Shelf Block Aliquots - Atlantic Region NAD83	DOI-BOEM
Protected Areas Database of the United States (PAD-US)	DOI-BOEM

Table 1: Theme NGDA Datasets.

Lifecycle Maturity Assessment (LMA) Overview

Introduction

The Geospatial Data Lifecycle has seven stages that agencies should use when developing, managing and reporting on NGDA Datasets. These stages and their associated benchmarks¹ are defined in the A-16 *Supplemental Guidance Stages of the Geospatial Data Lifecycle* (see Figure 1). Reporting on the status of each NGDA Dataset is an OMB requirement, and assessing the developmental maturity of the NGDA provides managers the ability to support NGDA Datasets in a more universal and transparent manner. The FGDC NGDA lifecycle maturity assessment is based on responses made by Dataset Managers to questions associated with benchmarks in each lifecycle stage. Each stage has a range of benchmark activities, from no activity to significant activity, which provide the interpretation of maturity for each benchmark within a stage and cumulatively for each stage. The cumulative level of activity across each stage and for all stages determines the maturity of the each NGDA Dataset based on a [Maturity Matrix](#) (see Table 2) and the response metrics from [How to Calculate Maturity](#). In this report, the LMA results for all the associated NGDA Datasets are aggregated through an average calculation at the Theme level. Additional information can be found at the GeoPlatform.gov [2017 Lifecycle Maturity Assessment \(LMA\) Community](#) web page. Individual [NGDA Dataset Reports](#) can be found at FGDC.gov.

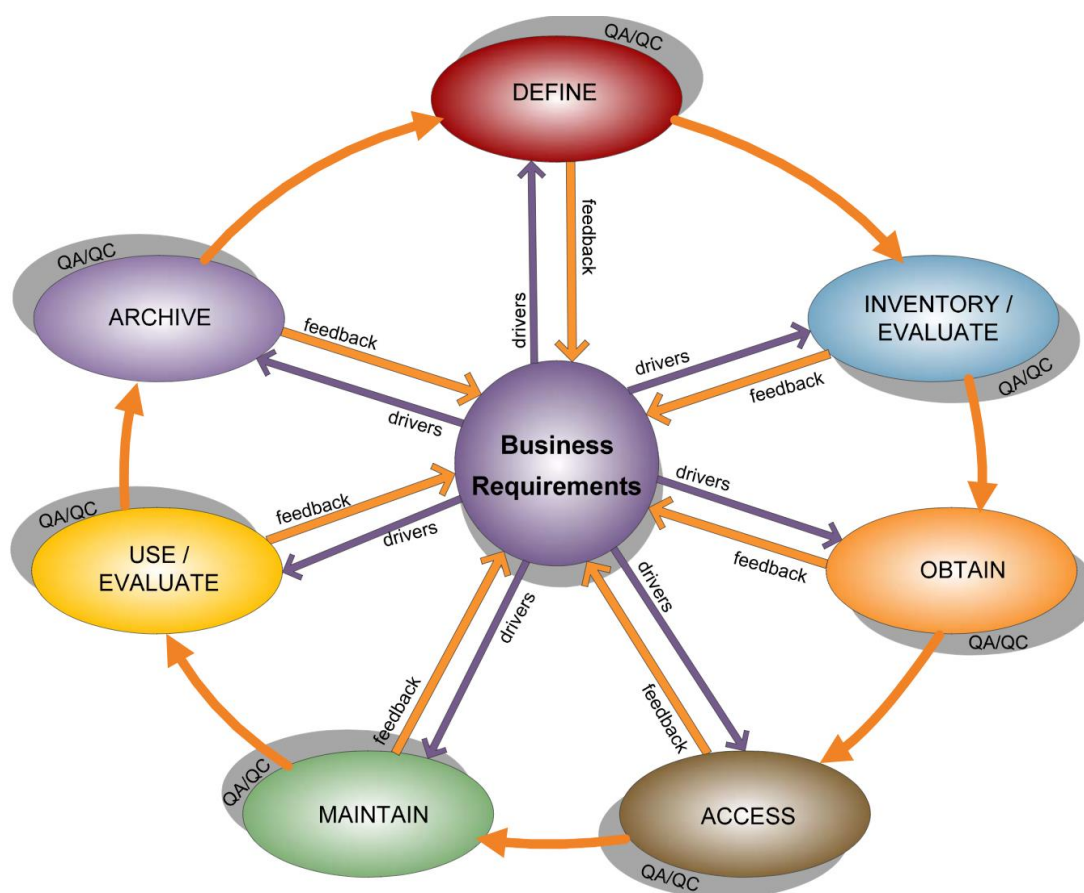


Figure 1. The Geospatial Data Lifecycle

¹ Benchmarks are detailed in Table B1 of the [Stages of the Geospatial Data Lifecycle](#) document.

2017 Lifecycle Maturity Assessment Maturity Matrix

The [Lifecycle Maturity Assessment Maturity Matrix](#) provides descriptions of the maturity characteristics of benchmark activities for each stage within a dataset that result in a maturity level of 0-5, with no activity being level zero and optimized being level five, applied consistently across all lifecycle stages.

Maturity Level	Maturity Characteristics for All Lifecycle Stages
Optimized; Established Level = 5	Dataset meets virtually all business needs of all users. The dataset is considered authoritative by owners and secondary users. It is curated across all stages of the approved lifecycle. Future needs are defined for both the primary owner and secondary users on a regular basis and resources for addressing both current and future business requirements are available.
Mature; Consistent Level = 4	Dataset meets all the business needs of the primary owner and most of the secondary users. The dataset is curated and used as an authoritative resource by the primary owner and secondary users. Future needs are being identified and steps are planned to address these. All stages are supported and reviewed on a recurring basis. The dataset is well managed in relation to the approved lifecycle.
Managed; Predictable Level = 3	Dataset meets a significant number of the business needs of the primary owner and is widely used by secondary users. Benchmark activities are occurring in at least four of the approved lifecycle stages. Management practices in relation to the approved lifecycle is moderate but consistent. Dataset is integrating changing business requirements in lifecycle stages impacting overall maturity.
Transition; Transformation Level = 2	Dataset meets business needs of the primary owner and has moderate use by secondary users. Benchmark activities are occurring in at least three stages. Efforts to integrate funding, include partners, and obtain data are not supported in a sustained manner. Management practices in relation to the stages of the approved lifecycle is limited.
Planned; Initial Development Level = 1	Dataset in initial planning or limited in meeting business needs of the primary owner. Benchmark activities in the approved lifecycle are just starting to consider secondary uses, Partners/stakeholders involvement is being defined and developed to support additional dataset uses. Dataset development is in a very early stage. Minimal or limited management against the benchmarks in the approved lifecycle.
No Activity Level = 0	Dataset not developed or meets project/local business needs of the primary owner. Secondary, additional uses, or partners/stakeholders were not considered. Dataset is not recognized as authoritative data or is part of a similar dataset. Not managed to any of the benchmarks in the approved lifecycle.

Table 2: 2017 Maturity Matrix.

2017 LMA Maturity Results for the Theme

Based on the LMA results, maturity averages are calculated for all NGDA Datasets associated with the Theme to illustrate a roll-up of the general questions for all stages, and each lifecycle stage as shown in Table 3 below. This table provides a high-level view of the aggregated maturity of the NGDA Datasets in the Theme.

Maturity Categories	Maturity Level
Roll-up NGDA Maturity	3 - Managed; Predictable
General Questions for All Stages	4 - Mature; Consistent
Stage 1: Plan/Define	3 - Managed; Predictable
Stage 2: Inventory/Evaluate	5 - Optimized; Established
Stage 3: Obtain	4 - Mature; Consistent
Stage 4: Access	4 - Mature; Consistent
Stage 5: Maintain	3 - Managed; Predictable
Stage 6: Use/Evaluate	4 - Mature; Consistent
Stage 7: Archive	2 - Transition; Transformation

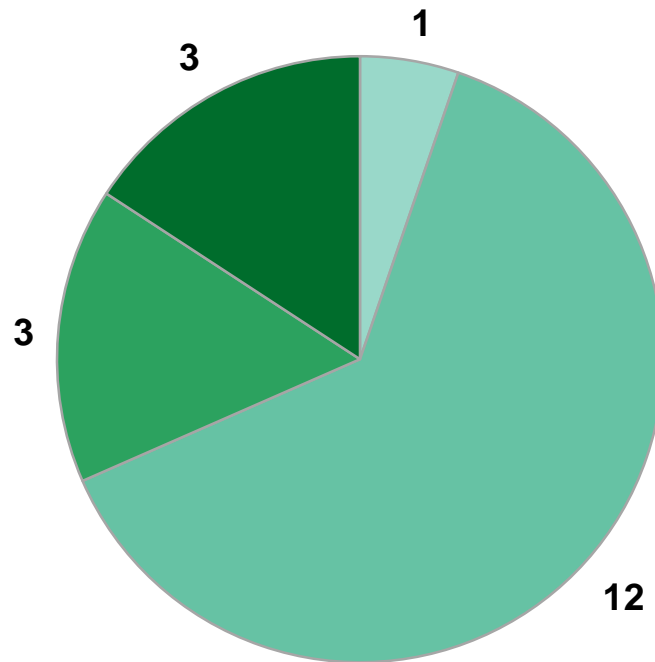
Table 3: 2017 Maturity Results.

LMA Process Changes between 2015 and 2017

In 2015, a baseline assessment of NGDA was performed for each of the datasets in the federal geospatial portfolio. Information related to the 2015 baseline LMA can be found at [2015 NGDA Lifecycle Maturity Assessment](#), which also includes a link to the 2015 Reports. A follow-up analysis of the 2015 LMA baseline process and its results identified ways to improve the LMA workflow, increase efficiency as well as decrease the reporting burden. Several recommendations were identified and implemented in 2017, which included improvements to normalize the responses in 2017. A secondary effect of improvements to normalization is that results from 2017 and 2015 are not directly comparable. These changes, and their impacts, are detailed in the webpage: [Temporal Changes in Lifecycle Maturity Assessment \(LMA\) Maturity and Results Comparisons](#).

Aggregated Maturity Level for Theme NGDA Datasets

The pie graph below shows the number of NGDA Datasets within each maturity level for this Theme.



Graph 1: Aggregated NGDA Dataset Maturity Level Counts in the Theme.

Key for NGDA Dataset Maturity Level:

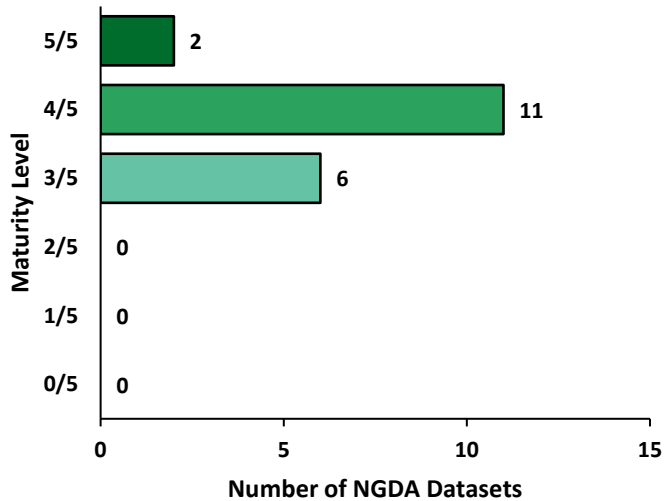
Optimized; Established Level = 5 5/5	Mature; Consistent Level = 4 4/5	Managed; Predictable Level = 3 3/5	Transition; Transformation Level = 2 2/5	Planned; Initial Development Level = 1 1/5	No Activity Level = 0 0/5
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Stage-based Maturity Levels for Theme NGDA Datasets

The following graphs provide information about the NGDA Dataset maturity level counts for each lifecycle stage within the Theme. This information visualizes the NGDA Datasets according to the maturity matrix, which can show potential opportunities or challenges within a Theme.

General Questions

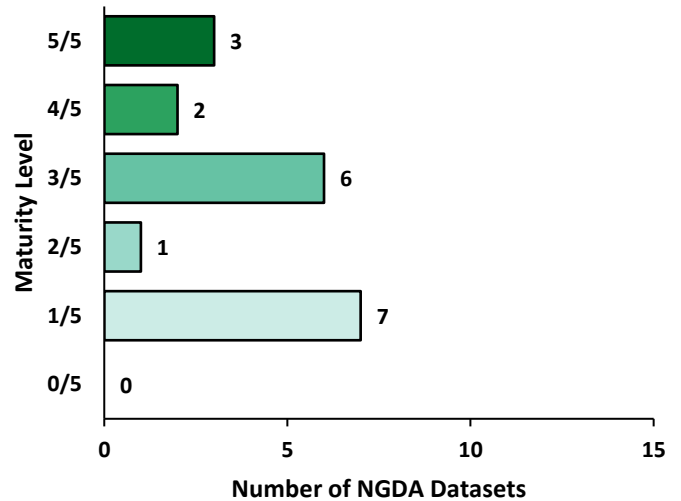
Data characteristics that are applicable to all stages.



Graph 2: General Questions Stage NGDA Maturity Level Counts.

Stage 1 - Define/Plan

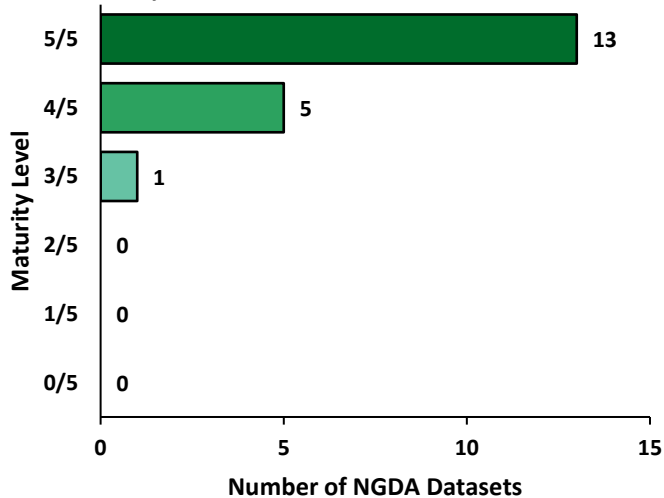
Characterization of data requirements based upon business-driven user needs.



Graph 3: Define/Plan Stage NGDA Maturity Level Counts.

Stage 2 - Inventory/Evaluate

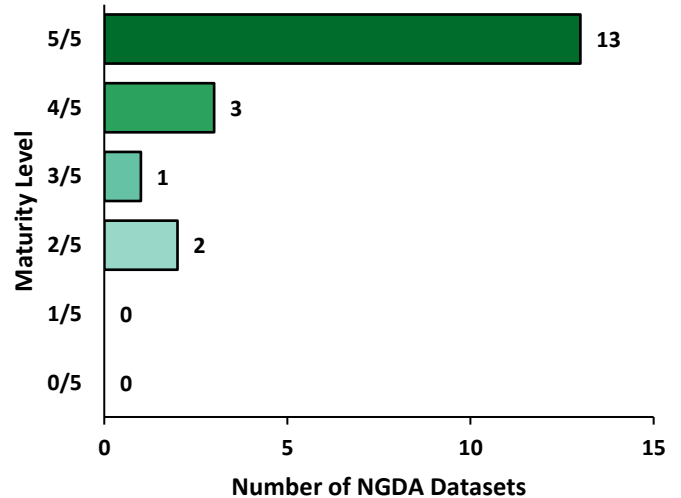
The creation and publication of a detailed list of data assets and data gaps (both internal and external) as they relate to business-driven user needs.



Graph 4: Inventory/Evaluate Stage NGDA Maturity Level Counts.

Stage 3 - Obtain

The collection, purchase, conversion, transformation, sharing, exchanging, or creation of geospatial data that were selected to meet the business needs is identified.



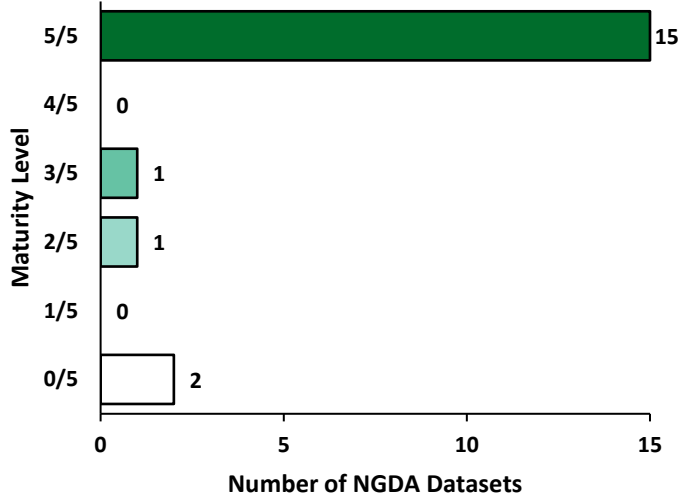
Graph 5: Obtain Stage NGDA Maturity Level Counts.

Key for NGDA Dataset Maturity Level:

Optimized; Established Level = 5 5/5	Mature; Consistent Level = 4 4/5	Managed; Predictable Level = 3 3/5	Transition; Transformation Level = 2 2/5	Planned; Initial Development Level = 1 1/5	No Activity Level = 0 0/5
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Stage 4 - Access

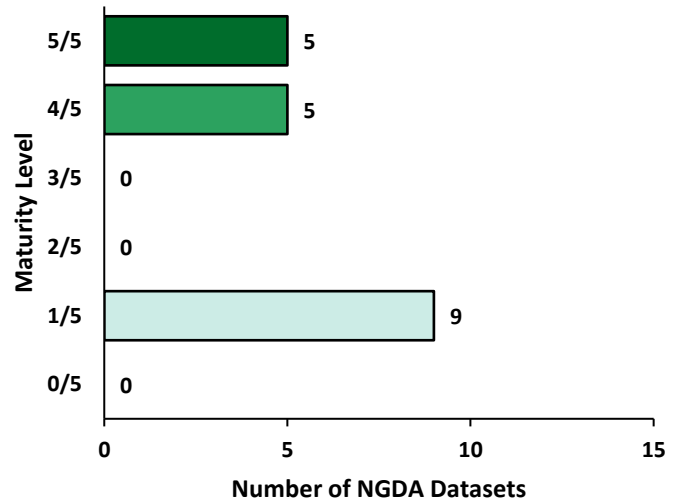
Making data known and retrievable through documentation and discovery mechanisms to meet user needs and business requirements.



Graph 6: Access Stage NGDA Maturity Level Counts.

Stage 5 - Maintain

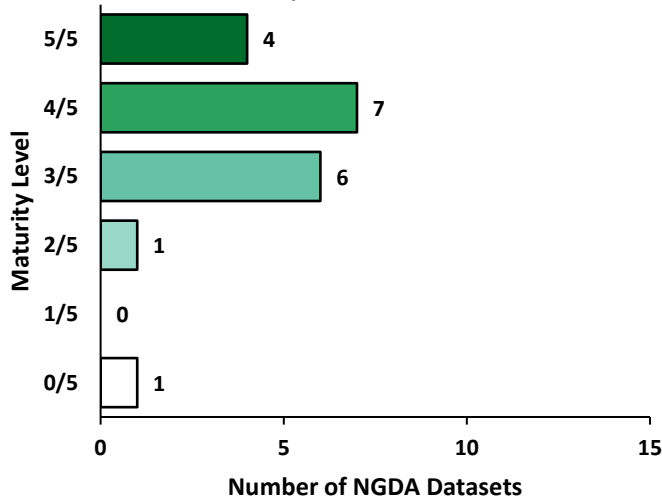
The ongoing processes and procedures to ensure that the data meet business requirements.



Graph 7: Maintain Stage NGDA Maturity Level Counts.

Stage 6 - Use/Evaluate

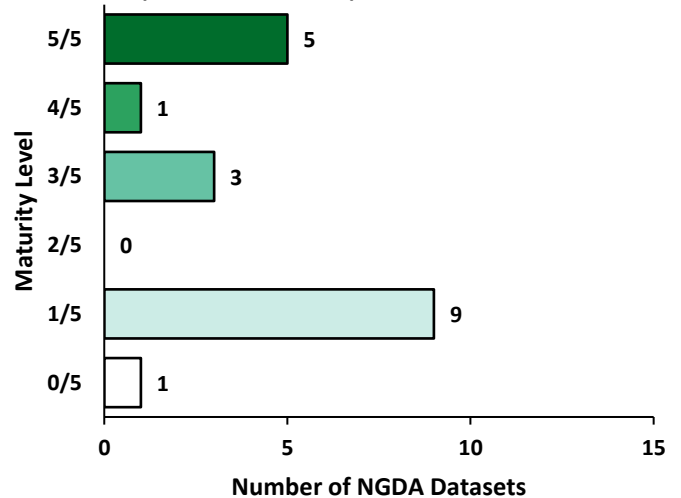
The ongoing assessment, validation, and potential enhancement of data to meet user needs and business requirements.



Graph 8: Use/Evaluate Stage NGDA Maturity Level Counts.

Stage 7 - Archive

Facilitate the appraisal, retention, storage, and accessibility of data and establish mechanisms for development of stewardship tools and services.



Graph 9: Archive Stage NGDA Maturity Level Counts.

Key for NGDA Dataset Maturity Level:

Optimized; Established Level = 5 5/5	Mature; Consistent Level = 4 4/5	Managed; Predictable Level = 3 3/5	Transition; Transformation Level = 2 2/5	Planned; Initial Development Level = 1 1/5	No Activity Level = 0 0/5
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Theme NGDA Dataset Maturity Levels for Selected LMA Questions

In this section, several LMA questions have been identified that provide additional insight into Theme NGDA Dataset maturity levels including funding, obtaining data (acquisition), and quality control/quality assurance. By separating these questions from a particular stage, more information can be discerned about the NGDA Datasets within a Theme and help identify activities that are doing well or where some additional attention may be needed. For each of these maturity questions, if the “0/5” (No process exists) option was selected, additional detail was requested. Optional information could also be provided for the supplemental justification questions under the “Other” response option.

Funding

Question 1 in the LMA asks about a process to obtain funding for all lifecycle stages such as planning, development, maintenance, access, and archiving of an NGDA Dataset. The question also provides additional detail about primary and secondary funding sources.

Question 1		General Questions
Is there a recurring process to obtain funding for all lifecycle stages of this dataset?		
Maturity Level	Number of Responses	Response Options
5/5	11	Funding support is part of agency budget on a recurring basis, funding is consistent and tied to business requirements, and supports all lifecycle stages
4/5	1	Funding is currently adequate and consistent but tied to business requirements whose appropriations are not directed to support all lifecycle stages of the NGDA
3/5	4	Funding support exists but is not adequate to meet known requirements, most lifecycle stages are supported
2/5	1	Funding is planned at agency level, supporting staff is assigned, but funding is not recurring, some lifecycle stages are supported
1/5	2	Funding is from local offices, budgeting effort is minimal, staffing is minimal
0/5	0	No process to obtain funding exists (Please explain)

Table 4: NGDA Maturity Level Totals for Funding.

Question 1.a		General Questions
1.a) To justify your response to Question 1, what is the primary funding source for your NGDA?		
Number of Responses	Response Options	
15	Federal agency – General lead agency budgetary funding for a specific program that supports this NGDA or the NGDA itself.	
2	Federal interagency – Agreements between two or more different Federal Department(s), Agency(ies), Bureau(s), and/or Office(s) to provide funding for a specific program that supports this NGDA or the NGDA itself.	
2	Other – (Please explain) <ul style="list-style-type: none"> • Forest Service personnel salaries are tied to agency-program budget allocations but software and data maintenance support funding is not. Funding for software and data maintenance support is requested, reviewed, and approved on an annual basis. • The BLM mainly compiles SMA data from other federal agencies. The only appropriated funding source for BLM SMA is provided internally. All other federal agencies rely on their own budget in order to support SMA. 	

Table 5: Primary funding source for NGDA Datasets in Theme.

Question 1.b		General Questions
1.b) To justify your response to Question 1, what is the secondary funding source for your NGDA?		
Number of Responses	Response Options	
1	Tribal government – Agreements with Tribal government(s) to provide funding for a specific program that supports this NGDA or the NGDA itself.	

Table 6: Secondary funding source for NGDA Datasets in Theme.

Obtaining Data

Question 10 in the LMA identifies whether a process exists for obtaining data related to the NGDA and if so, what actions are performed to obtain data. There may be multiple ways data is obtained for an NGDA Dataset.

Question 10		Stage 3 - Obtain
Is there a process for obtaining data for this dataset?		
Maturity Level	Number of Responses	Response Options
5/5	13	Fully implemented including recurring assessments
4/5	3	Implementation well established
3/5	0	Implementation progressing
2/5	2	Developed, documented, and implementation started
1/5	1	Under development
0/5	0	No process exists

Table 7: NGDA Maturity Level Totals for Obtaining Data.

Question 10.a		Stage 3 - Obtain
10.a) To justify your response to Question 10, what actions are performed to obtain data?		
Number of Responses	Response Options	
0	Obtain data by purchasing	
5	Obtain data by modifying, converting, or transforming data	
5	Obtain data by sharing/exchanging	
18	Obtain data by creating and/or collecting the data	
3	Other – (Please explain) <ul style="list-style-type: none"> • Contract for survey data from licensed surveyors that is recorded with the local registries. • Data must meet SDSFIE requirements and validation tests, as well as requirements of the users. Therefore, Districts are given appropriate discretion to use necessary acquisition methods • The National SMA dataset is a compilation of state SMA datasets and six Federal agencies, US Forest Service, Bureau of Indian Affairs, US Fish and Wildlife, National Parks Service, and National Landscape Conservation System. Various collection methods and parameters were used by each source and both scale and accuracy may vary across the final National SMA dataset. The scale for each individual source dataset is detailed in the metadata. 	

Table 8: Actions performed to obtain data for NGDA Datasets in Theme.

Quality Assurance/Quality Control (QA/QC)

Question 15 in the LMA asks whether a process for quality assurance/quality control exists and the level of maturity of the process.

Question 15		Stage 5 - Maintain
Is there a quality assurance/quality control (QA/QC) process as part of this dataset's maintenance?		
Maturity Level	Number of Responses	Response Options
5/5	5	Fully implemented including recurring assessments
4/5	2	Implementation well established
3/5	3	Implementation progressing
2/5	0	Developed, documented, and implementation started
1/5	9	Under development
0/5	0	No process exists

Table 9: NGDA Maturity Level Totals for Quality Assurance/Quality Control Process.

Cadastral Theme Strategic Goals and Objectives Progress Report

Introduction and Background

Each NGDA Theme has a Theme Strategic Plan to guide Theme development and management. It is developed by the Federal agencies with Theme leadership roles. Each Theme Strategic Plan describes the goals and objectives for the Theme and generally spans 3 to 5 years. It is assessed annually as needed for significant changes. In 2016-2017, the FGDC Steering Committee identified the additional priority for each Theme to develop a Theme Implementation Plan that identifies the actions and activities necessary to achieve the Theme's goals and objectives. The NGDA Themes' Strategic and associated Implementation Plans are available in Adobe PDF format via the respective Geoplatform.gov NGDA Theme Community pages (see Resource Links below).

Resource Links

Theme Strategic Plan: [Cadastral Theme Strategic Plan](#)

Theme Implementation Plan: [Cadastral Theme Implementation Plan](#)

Progress in 2017

As noted above, Theme Strategic Plans identify goals and objectives for the Theme as they relate to Agency Strategic Plans. The Theme Implementation Plans further identify actions and activities that will be taken to support those goals and objectives. The Implementation Plans also include milestones, projected completion dates and performance indicators, and identify stakeholders and responsible parties. A summary of progress against the Theme Strategic Plan goals and objectives is provided as part of this overall Theme Summary Report. The following table shows the progress status made toward achieving the objectives during 2017. Status includes three categories: 'Not Started' for those activities that have not gotten underway; 'In Progress' for those activities underway which will continue into the next year; 'Complete' for the activities finished in this time frame. Additionally, if activities supporting the goal and objective are completed in the current year and will reoccur again on an annual basis, they are designated 'Recurring (completed for 2017)'.

Goals and Objectives undertaken during 2017		Status
Goal 1: Cadastral Reference - Including the Public Land Survey System (PLSS) and Others Identify state and federal data stewards for Cadastral Reference, coordinate and support the effective collection and maintenance of the Cadastral Reference NGDA Datasets, facilitate sharing and data availability socialization of the Cadastral Reference data sets, and provide outreach and communication mechanisms for data stewards.		
Objective 1.1. Complete PLSS Data Steward Program A commercial off the shelf software package has been selected for PLSS maintenance and publication. This objective is to complete the identification of data stewards(s) for all 30 PLSS states including edge matching at state boundaries, publication schedule, shared custodianship, if needed, and feedback and socialization.		In Progress
Objective 1.2. Complete non-PLSS Cadastral Reference Data Set Definitions Using the same commercial package as the PLSS, develop, review, and adopt a cadastral reference system for each of the 20 non-PLSS states.		In Progress
Goal 2: Public Lands Surface Agency Management Coordinate with the US Geological Survey (USGS) in developing the Protected Areas Database of the US (PAD-US), a representation of federally owned lands and management designations. Provide BLM managed surface lands updates to PAD-US, while continuing to develop the land title and land records based data set for the Surface Management Agency (SMA), support the publication of PADUS database and data sets to NGDA services, facilitate sharing and data availability socialization of the SMA and PAD-US information, and provide outreach and communication mechanisms for data stewards.		
Objective 2.1. Standardize BLM Submissions to the PAD-US PAD-US is working with all federal land agencies as well as state and non-governmental agency data stewards (Trust for Public Lands, Ducks Unlimited, The Nature Conservancy, etc.) to compile an annual representation of public open space and other protected areas.		In Progress
Objective 2.2. Complete, maintain, and distribute the authoritative PAD-US. The US Geological Survey (USGS) Gap Analysis Program is the lead for this data set and this objective. Anticipated outcomes require the provision of additional resources through partnerships and / or new investment. This objective is directly related to and coordinated with the Governmental Units Strategic Plan - Objective 3.3 - The Federal Lands Subgroup (FLS) develops a data standard and the organizational strategies for federally managed lands. Action items identified here reflect the cadastral component of this multi-agency data set.		In Progress
Goal 3: Federal Subsurface Management Areas - Including offshore and continental There are two federal agencies responsible for federal subsurface rights management, the BLM on continental lands and Bureau of Ocean and Energy Management (BOEM) for offshore lands. Develop an effective aggregation and publication of BLM subsurface records and coordinate with BOEM offshore subsurface records, facilitate sharing and data availability socialization of the Subsurface Management Areas data sets, and establish ongoing coordination mechanisms.		

Objective 3.1. Develop an onshore (continental) nationwide federal subsurface rights data set. Establish the standards of achievement in terms of a proportionate improvement in the existing condition. Objectives should be specific, measurable, audience- or issue-directed, realistic, and time-bound.	In Progress
Objective 3.2. Develop an offshore nationwide federal subsurface rights data set for publishing and access through the NGDA services. This effort is the responsibility of BOEM. The following are the NGDA data sets and activities.	In Progress
Goal 4: Land Management Agency Coordination Provide coordination with other land management agencies and support collection, maintenance, standardization, access, and publication within the scope and responsibilities of A-16. The objectives and action items are identified and are the responsibility of the lead agency listed in the objective.	
Objective 4.1. National Park Service (NPS) NPS is committed to providing regular updates to the best available geospatial data representing both the legislative boundary and parcel ownership information for all park system areas. NPS will continue efforts to improve the maintenance and standardization of this authoritative data in support of efforts like the Protected Areas Database for the US (PAD-US) and, over time the land title based SMA. NPS will continue to actively participate in inter-agency groups whose goal is to improve communication and coordination of multi-agency cadastral data.	In Progress
Objective 4.2. Department of Defense (DoD)	In Progress
Objective 4.3. Forest Service (FS)	In Progress
Objective 4.4. Fish and Wildlife Service (FWS)	In Progress
Objective 4.5. Bureau of Indian Affairs (BIA) The Land Buy-Back Program for Tribal Nations implements the land consolidation component of the Cobell Settlement, signed into law by President Barack Obama through the Claims Resolution Act of 2010. The Settlement provides \$1.9 billion to purchase fractional interests in trust or restricted land from willing sellers at fair market value. Consolidated interests are immediately restored to tribal trust ownership for uses benefiting the reservation community and tribal members. There are approximately 245,000 owners of nearly three million fractional interests across Indian Country who are eligible to participate in the Buy-Back Program. The Program is currently planning to continue the purchase of fractionated interests until the end of 2022; however, Secretary Jewell is interested in exploring options for extending the timeframe of the Program. In addition to consolidating fractionated interest, the Program has designated up to \$60 million for the Cobell Education Scholarship Fund.	In Progress
Goal 5: Parcel Data Including Federal Rights and Interests and coordination of non-federal data sets Federal agencies do not have the authority to collect or maintain parcel data on non-federally managed lands. For non-federal lands facilitate an inventory of available parcel data and facilitate state aggregated standardized data. For federally managed lands (including tribal lands and offshore) coordinate with the managing agency to identify federal rights held or managed and facilitate sharing and data availability socialization of data sets, and provide outreach and communication mechanisms for federal land management agencies.	

Objective 5.1. Complete a parcel data web service standard Web services provide access to data set on a relatively continuous basis and typically originate from the data producers. These services can be defined as a template that includes the expected data elements, security or login requirements, and data download or retrieval limits. Web services can be used to provide authoritative data from local data producers to map services.	Not Started
Goal 6: Coordination Cadastral data by its nature is used by many other themes and also consumes data from other themes. We have identified several coordination agencies and themes and will continue to work with these other themes to ensure consistent standardization, vertical alignment, and appropriate currency.	
Objective 6.1. Inputs - Identify themes that collect data that affect cadastral data.	In Progress
Objective 6.2. Outreach - Identify and establish connections with Data Stewards and known and new data users.	In Progress
Objective 6.3. Communication and Education - establish communication mechanisms and develop educational materials related to cadastral data themes.	In Progress

Table 10: 2017 Progress Summary for Theme Strategic Plan Goals and Objectives.